# SURVEY OF FOUR LOCAL HEALTH DEPARTMENT AND SCHOOL DISTRICT RESPONSES TO SCHOOL INDOOR AIR QUALITY COMPLAINTS

The State Board of Health heard testimony in March, May, June, and September 2002 from parents and teachers regarding indoor air quality complaints at Cle Elum schools. Media stories have described a range of complaints regarding indoor air quality (IAQ) in school districts around the state, including Cle Elum-Roslyn, Peninsula (Artondale), Oak Harbor, and Moses Lake schools. The media coverage has generally indicated a certain level of controversy and difficulty in resolving issues.

Board staff contacted local health department and school districts in four communities receiving media coverage of school indoor air quality issues. The goal was to learn from their experiences with school IAQ problems. Information from this survey may not be representative of how local health departments and school districts across the state respond to school IAQ complaints.

## Background:

School indoor air quality problems exist throughout the state. A survey of local health departments' school activities, conducted by Department of Health (DOH) in 1992 and 1996, found that in both years all local health departments had received and responded to school IAQ complaints. The number of schools contacting DOH about indoor air quality problems between 1995 and 2000 has risen from approximately from 1 to about 14 ("The Health of Washington State," 2002). Because schools are not required to contact DOH when IAQ problems exist, the number of schools with IAQ problems is probably greater.

All local health departments are involved with school environmental health issues by means of their authority to do school construction site and plan reviews, and preoccupancy and periodic inspections (Chapter 246-366 WAC). All school districts are involved in ensuring healthy school environments, through regular facility maintenance and operation activities. Authority for school environmental health lies with the State Board of Education (SBOE), the state Office of the Superintendent of Public Instruction (OSPI), school district superintendents and school boards (RCW 28A.315 through 335).

- OSPI and school district superintendents and boards are involved in determining school closures and allocation of funds (WAC 392-129-140 through -150).
- School district boards must evaluate existing building conditions and report on these evaluations to OSPI as a condition of receiving state construction assistance (WAC 180-27-535).
- OSPI and the school districts consider health and safety in new and existing site reviews and evaluations (WAC 180-26-020).
- SBOE and OSPI approve school district requests for funding for school construction projects and emergency repairs, including repairs due to imminent health and safety hazards (WAC 180-27). Authorization of emergency repairs requires:

Certification by a health officer, fire official, building official, labor and industries official, or other independent and competent authority that an

imminent health and safety hazard to building occupants of a specified nature and extent exists unless the emergency repairs are made. (WAC 180-27-605)

## **Survey participants:**

Board staff contacted:

Grant County Health District and Moses Lake School District
Island County Health Department and Oak Harbor School District
Kittias County Health Department and Cle Elum-Roslyn School District
Tacoma-Pierce County Health Department and Peninsula School Districts
When contacting the school districts, Board staff was referred to a Superintendent, a
Maintenance Manager, an Executive Director of Business and Operations, and a Business
Manager. When contacting the local health departments, Board staff spoke directly with
an administrator, and was referred to an environmental health director, a program
specialist, and an environmental health specialist.

## **Complaints received:**

## Local Health Department staff responses:

All of the LHD staff surveyed had received indoor air quality complaints, and most complaints were received from parents and teachers. Many of the complaints were from the same people, and many were about the same school. The number of complaints received ranged from an average of 1 a year, to hundreds. Complaints included a wide range of health symptoms that people suspected were due to school IAQ. The most common complaints were of allergy and cold-like symptoms.

### School District staff responses:

All of the school district (SD) staff surveyed had received indoor air quality complaints, primarily from teachers. The number of complaints received ranged from 1 this year, to hundreds. Complaints included a wide range of symptoms people associated with exposure to mold or bad indoor air quality in general.

#### **Decisions made and actions taken:**

### Local Health Department staff responses:

All the LHD staffs surveyed responded to school IAQ complaints over the phone or by going to the school to look into the complaint. They all relied on external expertise, for phone or on-site consultation and for testing, from Department of Health, Washington State University Extension, and Northwest Air Pollution Authority staff. LHD staffs surveyed also occasionally obtained information from consultants hired by the school district.

LHD staffs surveyed reported that causes of the complaints were sometimes identified, and sometimes not. Sometimes IAQ problems such as large amounts of dust are found, but not definitively associated with the complaints. All LHD staffs surveyed made recommendations to school district staff, along with recommendations from additional agency or private consultants.

LHD staffs surveyed said that authority and responsibility for taking action lies with the school district administrators, staff, and school board. They also said that LHDs also have the authority to take action when there is a health problem involved, but haven't used this authority, to their knowledge.

LHD staffs surveyed reported that decisions and actions are based on the best available information. If the problem is identified, it is remediated. If it is not identified, then a systems approach is adopted to improve building cleaning and ventilation.

LHD staffs surveyed said they are often involved in follow-up actions such as continued discussions with school staff, parents, and other agencies or private consultants offering recommendations or remediating the problems.

## **School District staff responses:**

All the SD staff surveyed reported that they or their staff did investigations of the IAQ complaints, with assistance from other government agencies, such as DOH, L&I, WSU or Northwest Air Pollution Authority staff, or private consultants. All had testing done by private consultants; some were able to do some testing on their own. None of the SDs identified the cause of the complaints. Testing results ruled out mold as the cause at all the SDs. Other IAQ and building problems were identified and addressed. EPA's Tools for Schools processes were used to document and address the problems.

Most SD staff surveyed said that their Superintendent and School Board have the primary authority to make decisions about school IAQ. Additional school district staffs, teachers, parents and community members are involved in the decisions about school IAQ issues. An advisory committee, coalition, team, and public meetings are used to incorporate public and staff input into decision making.

Most SD staff reported that decisions about school IAQ issues were based on the best interest of the students and staff, and the pervasiveness of health concerns. SD staff described very different school situations, however, in terms of the options and resources the school had. All SD staffs described follow-up actions that also varied depending on the situation, but all involved extensive remediation and communication of the remediation actions.

## **Determining resolution:**

## Local Health Department staff responses:

LHD staffs surveyed consider school IAQ problems resolved when they don't receive any more complaints, when the problems are remediated, and people within the community accept the situation.

## School District staff responses:

Most SD staff also considered school IAQ problems resolved when they don't receive any more complaints from the majority of teachers, students and community members.

# Recommendations from local health department and school district staffs to improve school and public health responses

Recommendations from local health department and school district staff are listed below, and divided into four categories:

## 1. Law, regulation, standards, and guideline recommendations:

### From school district staff:

- Performance standards are needed in order to negate or substantiate IAQ complaints. Right now we have no way to affirm that IAQ issues are resolved.
- Change the state's low bid law to mandating a building commissioning program instead. As it applies to the school building and remodeling process low bid requirements are generally at the root of most of the maintenance problems in new buildings, including IAQ problems. It results in mediocre building design, specifications, and construction. Any cost savings derived from the law are negated by maintenance and IAQ problems.
- Include the input of people who deal with the school IAQ issues on a regular basis in any efforts, such as legislation.

## 2. Funding:

## From local health department staff:

• Establish a funding mechanism for local health departments to provide the required school plan and site reviews, and pre-occupancy and periodic school inspections (local health department staff). LHDs are responsible for school plan reviews, site reviews, and pre-occupancy and periodic inspections, but often do not receive fees for these services. The local boards of health determine the fees. Most environmental health programs are increasingly fee and grant supported, which leaves little capacity for services without fees.

# 3. Information, training and capacity building:

## From local health department staff:

- Assist LHDs by providing training to LHD staff and technical assistance. Plans
  for new large schools, and junior and high schools, are more difficult to review –
  smaller LHDs don't often review these types of plans, and need more training to
  do so effectively.
- Train teachers and maintenance staff in monitoring and improving their school's IAQ, along the lines of EPA's Tools for Schools. Ensuring good IAQ is an ongoing process.

### From school district staff:

- Have a team of experts at the state level who can assist school district administrations.
- Know which agencies to contact about school IAQ issues.
- Create an online bulletin board specifically designed to share IAQ information and issues between school districts. This could include government and private sources of information, and provide IAQ response criteria and best practices models to improve responses.
- Create a database school district staff can access of similar problems and solutions different schools have experienced, and learn from each other.
- Information on what to be aware of, and what do to prevent problems, for renovations and new construction. The K-12 and Best Practices manuals are not useful at all staff levels.
- Have staff attend the EPA Tools for Schools conference.

### 4. Coordination and communication:

### From local health department staff:

- We need to ask what kind of infrastructure we want in the schools and identify the role of each of the agencies and communities in making it happen.
- Federal, state, and local agencies need to work together better. Relationships between LHDs and school districts vary greatly. Some school district staff view LHDs as regulators, not partners, so they call other agencies first. All agencies need to work collaboratively, share resources and information, in order to solve school IAQ problems.
- LHDs and school districts need to improve communication with each other, and with people concerned about school IAQ issues. They need to involve the community from the beginning, and have viable school IAQ committees with teachers and community representatives.
- The public needs to know they should call the LHD about school IAQ concerns, as they do with food safety concerns.

## From school district staff:

- SDs should develop and implement communication plans. A trusted authority is needed to communicate the SD's plans and responses to IAQ problems. An outside authority may be needed if there is no local authority that is trusted.
- Use a credible source of information to help communicate with the community and educate staff.
- Don't ignore IAQ problems take action immediately and communicate your actions to everyone. Let people know you're using all the resources available. Respond to people's complaints.